VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION

Page 1, change the first paragraph as follows:

Background of the Invention
1. Field of the Invention

This invention relates to the use of mobile Internet Protocol in the Universal Mobile Telephone System (UMTS) and the General Packet Radio System (GPRS), and relates in particular to the support of intra-PLMN (Public Land Mobile Network) user mobility by means of Mobile Internet Protocol.

Page 1, change the second paragraph as follows:

2. Description of the Prior Art

With the rapidly growing use of Internet Protocol (IP), an effective method of supporting mobility in UMTS and GPRS by use of protocols developed by the Internet Engineering Task Force (IETF) is highly desirable.

Page 1, change the fourth paragraph as follows:

Summary of the Invention

It is an object of the invention to provide a method and apparatus by which advertisements can be sent to a MS efficiently, and with minimum handover latency.

Page 1, change the seventh paragraph as follows:

Brief Description of the Drawings

The invention will be described by way of example only with reference to the accompanying drawings in which:

1

Page 2, change the third paragraph as follows:

Detailed Description of the Invention

In Figure 1, a mobile system (MS) 12 in the GPRS 10 is connected across a radio interface Um to a Radio Network Controller 14 which is connected through [an] a Serving GPRS Support Node (SGSN) 16 and a Gateway GPRS Support Node (GGSN) 18 to the Internet 20. The MT 12, RNC 14 and GSNs 16 and 18 represent a public Land Mobile Network, and the SGSN 16 may be connected to a GGSN 22 of another PLMN 24.

IN THE CLAIMS

Amend claim 1 as follows:

1 1.   A method of supporting mobile internet protocol [In the general packet radio
2 service] when a mobile system moves from a former routing area to a new routing area
3 and sends to a [the] controlling support node a routing area update message,[a method of
4 supporting mobile internet protocol characterized in that] comprising the step of:
5   on receipt of [said] the routing area update message, sending a mobile Internet
6 protocol agent advertisement [is sent only] to [said] the mobile system.

Amend claim 2 as follows:

1   2. A method according to claim 1 in which [said] the advertisement includes
2 challenge/response and network access identifier extensions

Amend claim 3 as follows:

1   3. A method according to claim 1 [or claim 2] in which [said] the advertisement
2 is sent on a [general packet radio service system] traffic channel.

2

Amend claim 4 as follows:

1   4. A method according to [any preceding] claim <u>1</u> in which the mobile Internet

2 protocol movement detection algorithm [present in the general packet radio service is

3 arranged to detect] <u>detects</u> a change of foreign agent of [said] <u>the</u> mobile system.

Amend claim 5 as follows:

1   5. A method according to claim 4 in which on detection of a change of foreign

2 agent, [said] <u>the</u> mobile system [in immediately] <u>is</u> registered by mobile internet protocol

3 registration.

Amend claim 6 as follows:

1   6. A method according to [any preceding] claim <u>1</u> in which the former and new

2 routing areas are within the same or different [GPRS] support networks, and the

3 advertisement is sent after successful sending and receipt of routing area update request,

4 acceptance and completion messages.

Amend Claim 7 as follows:

1   7. A method according to [any one of claims 1 to 5] <u>claim 1</u> in which the former

2 and new routing areas are within different radio network controllers and the

3 advertisement is sent after successful sending and receipt of radio network controller

4 relocation request and completion messages.

IN THE ABSTRACT

Amend as follows:

In the GPRS when a MS moves from a former [RA] <u>routing area</u> to a new [RA] <u>routing area</u>, a method of supporting mobile Internet protocol characterized in that on receipt of a routing area update message from the MS, a mobile Internet protocol agent advertisement is sent only to that MS. The move may be inter-SGN or intra-SGN or may involve a change of RNC. The method allows efficient use of radio resources.